

Work Order ID 58462

May 7, 2010 10:21:30 AM



Page 1

Item ID: D412-702-341

Accept



Setup Start



Revision ID:

Item Name: 13-Man Shoulder Harness, 3 point

Stop



Start Date: 07/05/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 11/05/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan: 

Date: 10507

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

DSI9511

A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D412-702-341 CHG001

8/10/06/23

105

0.00



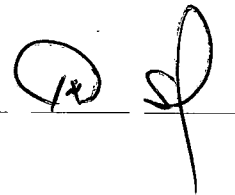
Pick Kit

Packaging

Memo

0.00

Packaging

10-6-23 

110

0.00



QC4- 100% Inspect kits for completeness

QC

Memo

0.00

Quality Control

8/10/06/23



Work Order ID 58462

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Page 2

Item ID: D412-702-341

Accept



Setup Start



Revision ID:

Stop



Item Name: 13-Man Shoulder Harness, 3 point

Start Date: 07/05/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 11/05/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

0.00



Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-702-341

Location: SPPPP Rev: A

10-6-23

SJ

130

0.00



QC21- Final Inspection - Work Order Release

QC

Memo

0.00

Quality Control

10/06/24

CL10/6/24

Picklist Print

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Page 1

Work Order ID: 58462

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Start Date: 07/05/2010

Required Date: 11/05/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
S D412-702-301 Harness Assembly		Manufactured	No			105	Each	0.0000	2	① ① B58452 B59923 10-6-235		
S D412-702-303 Harness Assembly		Manufactured	No			105	Each	0.0000	2	① ① B58454 B59922 10-6-235		
S D412-702-305 Harness Assembly		Manufactured	No			105	Each	0.0000	1	B59645 10-6-235		
S D412-702-307 Harness Assembly		Manufactured	No			105	Each	0.0000	1	B59649 10-6-235		
S D412-702-309 Harness Assembly		Manufactured	No			105	Each	0.0000	1	B59647 10-6-235		
S D412-702-311 Harness Assembly		Manufactured	No			105	Each	0.0000	1	B59648 10-6-235		
S D412-702-313 Harness Assembly		Manufactured	No			105	Each	0.0000	1	B59649 10-6-235		
S D412-702-315 Harness Assembly		Manufactured	No			105	Each	0.0000	1	B59650 10-6-235		
S D412-702-317 Harness Assembly		Manufactured	No			105	Each	0.0000	1	B59651 10-6-235		

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Work Order ID: 58462

Parent Item: D412-702-341

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Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Start Date: 07/05/2010

Required Date: 11/05/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	---------------	----------------	--------

D412-702-321		Manufactured	No			105	Each	0.0000	1			
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Harness Assembly

D412-702-323		Manufactured	No			105	Each	0.0000	1			
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Harness Assembly

D412-702-059		Manufactured	No			105	Each	11.0000	1			
--------------	--	--------------	----	--	--	-----	------	---------	---	--	--	--



Grommet

CHL700

Location

Loc Qty

Loc Code

FG122

11

55670

10

57202

1

105

Each

3.0000

D3761-1-041

Manufactured No



HOOK & LOOP STRIP

Location

Loc Qty

Loc Code

ST245

3

57662

3

105

Each

13.0000

D3542-1

Manufactured No



Bracket

Location

Loc Qty

Loc Code

ST245

13

32606

2

47140

3

51309

8

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Picklist Print

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Work Order ID: 58462

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Start Date: 07/05/2010

Required Date: 11/05/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
D3571-1 Guide		Manufactured	No			105	Each	17.0000	7	1	10-6-23	35

Location Loc Qty Loc Code

ST245A 17
47141 7
57226 10

D3571-3 Guide		Manufactured	No			105	Each	18.0000	2	1	10-6-23	4x
------------------	--	--------------	----	--	--	-----	------	---------	---	---	---------	----

Location Loc Qty Loc Code

ST245A 18
57227 8
57363 10

D3572-041 Guide Assembly		Manufactured	No			105	Each	4.0000	2	1	10-6-23	1
-----------------------------	--	--------------	----	--	--	-----	------	--------	---	---	---------	---

Location Loc Qty Loc Code

ST260 4
55679 4

D3578-041 Doubler		Manufactured	No			105	Each	110.0000	12	1	10-6-23	1
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Location Loc Qty Loc Code

ST244A 110
51640 2
52071 108

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Work Order ID: 58462

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Start Date: 07/05/2010

Required Date: 11/05/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
D3610-041 Bracket		Manufactured	No			105	Each	15.0000	2	1	10-6-235	

Location Loc Qty Loc Code

ST244A 15

47144 15

D3618-1 CAP		Manufactured	No			105	Each	84.0000	2	1	10-6-235	
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Location Loc Qty Loc Code

ST244A 84

55669 84

AN4-10A Bolt		Purchased	No			105	Each	155.0000	4	1	10-6-235	
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Location Loc Qty Loc Code

ST356 155

111425 4

112969 1

113422 50

114523 100

AN4-16A Bolt		Purchased	No			105	Each	165.0000	2	1	10-6-235	
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Location Loc Qty Loc Code

ST358 165

114129 15

114330 50

114523 100

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Work Order ID: 58462



Parent Item: D412-702-341



Parent Item Name: 13-Man Shoulder Harness, 3 point

Start Date: 07/05/2010

Required Date: 11/05/2010

Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
AN4-25A BOLT		Purchased	No			105	Each	106.0000	4	10-6-23	sl	

Location	Loc Qty	Loc Code
ST360	106	
104438	6	
111605	50	
114330	50	

AN4-27A Bolt		Purchased	No			105	Each	26.0000	4	10-6-23	sl	
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Location	Loc Qty	Loc Code
ST360	26	
113538	26	

AN4-44A Bolt		Purchased	No			105	Each	94.0000	2	10-6-23	sl	
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Location	Loc Qty	Loc Code
ST360	94	
104806	94	

MS24693-S274 Screw		Purchased	No			105	Each	20.0000	2	10-6-23	sl	
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Location	Loc Qty	Loc Code
ST288	20	
108560	20	

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Work Order ID: 58462

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point


Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Start Date: 07/05/2010

Required Date: 11/05/2010


Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
MS24694-S56  SCREW		Purchased	No			105	Each	131.0000	3	1	10-6-23	


Location Loc Qty Loc Code

ST289A 131
104407 131

MS24694-S58  Screw		Purchased	No			105	Each	144.0000	10	3	10-6-23	
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Location Loc Qty Loc Code


ST289A 144
104407 144

MS24694-S60  Screw		Purchased	No			105	Each	123.0000	1	10	10-6-23	
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Location Loc Qty Loc Code

ST289A 123
104407 123

AN960JD416  Washer		Purchased	No			105	Each	0.0000	26	1	11/5/00 10-6-23	
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AN960JD416L  Washer		Purchased	No			105	Each	465.0000	4	1	10-6-23	
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Location Loc Qty Loc Code

ST346 465
110153 465

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Parent Item Name: 13-Man Shoulder Harness, 3 point


Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Start Date: 07/05/2010

Required Date: 11/05/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
MS21042L4  Nut		Purchased	No			105	Each	2,408.000	12	1		

1114718 10-6-23 sf

Location	Loc Qty	Loc Code
ST139	2	
111827	2	
ST300	2098	
113422	96	
114523	1994	
9063	8	
ST463	308	
114416	308	

CR3212-4-4



Cherry Rivet

Purchased No

105 Each 88.0000

24

10-6-23 sf

Location	Loc Qty	Loc Code
ST311	88	
111359	88	

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DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV. 3

REF TCCA STC SH04-7

REF FAA STC SR01997NY

REF EASA STC EASA.I.M.R.S.00710

REFERENCE ONLY

This service instruction adds several kits equipped with improved inertia reels:

The Dart **D412-702-341** 13-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for all 13 passenger seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-041B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-343** 5-Man Forward Facing Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 5 forward facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-043B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-345** 4-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 4 aft facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-045B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-347** 4-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 4 side facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-047B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-349** 1-Man Shoulder Harness Kit provides a 3-point harness with an inertia reel and joined lap and shoulder belts for the center forward facing seating position in the aircraft cabin. The kit also contains hardpoints for securing the harness. The harness for this kit meets the requirements of TSO-C114 and replaces the existing lap belts. This kit should be installed similar to the D412-702-049B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-351** 1-man 3-point shoulder harness kits are available for the outboard seats of the 5-man forward facing bench in Bell 205/212/214/412 model aircraft. The kit can be installed LH or RH. These kits should be installed similar to the D412-702-051B/052B kits, as detailed in Table 1 of this service instruction.

The Dart **D214-702-337** 5-Man Aft Facing Shoulder Harness Kit provides 3-point harnesses with inertial reels and joined lap and shoulder belts for the 5-man aft facing seat installed in the Bell 214B/B1 model aircraft. This kit should be installed similar to the D214-702-037B kit, as detailed in Table 1 of this service instruction.

The Dart **D205-702-353** 4-Man Aft Facing Shoulder Harness Kit provides 3-point harnesses with inertial reels and joined lap and shoulder harnesses for the 4-man aft facing seat installed in the UH-1 model aircraft. This kit should be installed similar to the D205-702-053B kit, as detailed in Table 1 of this service instruction.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01






APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.03.22

CERT. NO.: SH04-7

ISSUE NO.: 3

A	NEW ISSUE	CP	10.03.18
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9511	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		NEW SHOULDER HARNESS KITS	NTS
DATE	10.03.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

REFERENCE ONLY

INSTALLATION

The Dart D412-702-3XX kits should be installed similar to the kits in Installation Instructions IIN-D412-702 Rev. E or Dart Service Instruction (DSI) listed below:

TABLE 1

Part Number	Description	Install similar to:
D412-702-341	Shoulder Harness Kit	D412-702-041B (IIN-D412-702, DSI 9408)
D412-702-343	Shoulder Harness Kit	D412-702-043B (IIN-D412-702, DSI 9453 [214], DSI 9408)
D412-702-345	Shoulder Harness Kit	D412-702-045B (IIN-D412-702, DSI 9469)
D412-702-347	Shoulder Harness Kit	D412-702-047B (IIN-D412-702, DSI 9408)
D412-702-349	Shoulder Harness Kit	D412-702-049B (IIN-D412-702, DSI 9408)
D412-702-351	Shoulder Harness Kit	D412-702-051B (LH) (DSI 9397, DSI 9408) D412-702-052B (RH) (DSI 9397, DSI 9408)
D214-702-337	Shoulder Harness Kit	D214-702-037B (DSI 9454)
D205-702-353	Shoulder Harness Kit	D205-702-053B (DSI 9460)
D412-702-301	Harness Assembly	D412-702-101B (IIN-D412-702)
D412-702-303	Harness Assembly	D412-702-103B (IIN-D412-702)
D412-702-305	Harness Assembly	D412-702-105B (IIN-D412-702)
D412-702-307	Harness Assembly	D412-702-107B (IIN-D412-702)
D412-702-309	Harness Assembly	D412-702-109B (IIN-D412-702)
D412-702-311	Harness Assembly	D412-702-111B (IIN-D412-702)
D412-702-313	Harness Assembly	D412-702-113B (IIN-D412-702)
D412-702-315	Harness Assembly	D412-702-115B (IIN-D412-702)
D412-702-317	Harness Assembly	D412-702-117B (IIN-D412-702)
D412-702-319	Harness Assembly	D412-702-119B (DSI 9454)
D412-702-321	Harness Assembly	D412-702-121B (DSI 9454, DSI 9469)
D412-702-323	Harness Assembly	D412-702-123B (DSI 9454, DSI 9469)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN	92	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	92	
CHECKED	1	DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9511 SHEET 2 OF 6
APPROVED	140	TITLE SCALE
DE APPR.	14	NEW SHOULDER HARNESS KITS NTS
DATE	10.03.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

REFERENCE ONLY

PARTS LIST

TABLE 2

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
X						D412-702-341	Dart 13-Man 3-Point Shoulder Harness Kit
	X					D412-702-343	Dart 5-Man 3-Point Forward Facing Shoulder Harness Kit
		X				D412-702-345	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit
			X			D412-702-347	Dart 4-Man 3-Point Side Facing Shoulder Harness Kit
				X		D412-702-349	Dart 1-Man 3-Point Forward Shoulder Harness Kit
					X	D412-702-351	Dart 1-Man 3-Point Shoulder Harness Kit
1	1		1	1		D412-702-059	GROMMET KIT
9	5		4	1	1	D3761-1-041	HOOK AND LOOP STRIP (DSI 9408)
2	1		1			D412-702-301	HARNESS ASSEMBLY (NEW)
1*	1*		1*			D3573-7	ADAPTER
1*	1*		1*			D4088-041	SHOULDER HARNESS (NEW)
4*	4*		4*			MS24693S272	SCREW
4*	4*		4*			AN960JD10LL	WASHER
4*	4*		4*			MS21042L3	NUT
2	1		1			D412-702-303	HARNESS ASSEMBLY (NEW)
1*	1*		1*			D3573-8	ADAPTER
1*	1*		1*			D4088-041	SHOULDER HARNESS (NEW)
4*	4*		4*			MS24693S272	SCREW
4*	4*		4*			AN960JD10LL	WASHER
4*	4*		4*			MS21042L3	NUT
1	1			1		D412-702-305	HARNESS ASSEMBLY (NEW)
1*	1*			1*		D3573-1	ADAPTER
1*	1*			1*		D4088-041	SHOULDER HARNESS (NEW)
4*	4*			4*		MS24693S273	SCREW
4*	4*			4*		AN960JD10LL	WASHER
4*	4*			4*		MS21042L3	NUT
1	1				1	D412-702-307	HARNESS ASSEMBLY (NEW)
1*	1*				1*	D3573-3	ADAPTER
1*	1*				1*	D4088-041	SHOULDER HARNESS (NEW)
4*	4*				4*	MS24693S272	SCREW
4*	4*				4*	AN960JD10LL	WASHER
4*	4*				4*	MS21042L3	NUT
1	1					D412-702-309	HARNESS ASSEMBLY (NEW)
1*	1*					D3573-3	ADAPTER
1*	1*					D4088-041	SHOULDER HARNESS (NEW)
4*	4*					MS24693S272	SCREW
4*	4*					AN960JD10LL	WASHER
4*	4*					MS21042L3	NUT

* denotes that part is included in assembly above






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CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9511	SHEET 3 OF 6
APPROVED		TITLE	SCALE
DE APPR.		NEW SHOULDER HARNESS KITS	NTS
DATE	10.03.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

REFERENCE ONLY

...continued from previous page

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
1		1				D412-702-311 /	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-1	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	SCREW
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1		1				D412-702-313	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-2	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	SCREW
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1			1			D412-702-315	HARNESS ASSEMBLY (NEW)
1*			1*			D3573-5	ADAPTER
1*			1*			D4088-041	SHOULDER HARNESS (NEW)
4*			4*			MS24693S272	SCREW
4*			4*			AN960JD10LL	WASHER
4*			4*			MS21042L3	NUT
1			1			D412-702-317	HARNESS ASSEMBLY (NEW)
1*			1*			D3573-5	ADAPTER
1*			1*			D4088-041	SHOULDER HARNESS (NEW)
4*			4*			MS24693S272	SCREW
4*			4*			AN960JD10LL	WASHER
4*			4*			MS21042L3	NUT
1		1				D412-702-321	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-3	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	BOLT
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1		1				D412-702-323	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-4	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	BOLT
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT

* denotes that part is included in assembly above

continued next page...

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01






APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.03.22

CERT. NO.: SH04-7

ISSUE NO.: 3

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9511 SHEET 4 OF 6
APPROVED		TITLE SCALE
DE APPR.		NEW SHOULDER HARNESS KITS NTS
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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

REFERENCE ONLY

...continued from previous page

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
2	2					D3542-1	BRACKET
7	3		4	1		D3571-1	GUIDE
2	2					D3571-3	GUIDE
2		2				D3572-041	GUIDE ASSEMBLY
12	6		6	2		D3578-041	DOUBLER
2	2					D3610-041	BRACKET
2	2					D3618-1	CAP
4	4					AN4-10A	BOLT
2		2				AN4-16A	BOLT
4		4				AN4-25A	BOLT
4		4				AN4-27A	BOLT (DSI 9469)
2	2					AN4-44A	BOLT
2	2					MS24693S274	SCREW
3	3			1		MS24694S56	SCREW
10	2		8			MS24694S58	SCREW
1	1			1		MS24694S60	SCREW
26	6	20				AN960JD416	WASHER
4	4					AN960JD416L	WASHER
12	6	6				MS21042L4	NUT
24	12		12	4		CR3212-4-4	RIVET

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: [Signature]
D. SHEPHERD (DE # 02)

DATE: 10.03.22

CERT. NO.: SH04-7

ISSUE NO.: 3

DESIGN	<u>9</u>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	<u>9</u>	
CHECKED	<u>[Signature]</u>	DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9511 SHEET 5 OF 6
APPROVED	<u>[Signature]</u>	TITLE SCALE
DE APPR.	<u>[Signature]</u>	NEW SHOULDER HARNESS KITS NTS
DATE	10.03.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60483

July 13, 2010 8:09:24 AM

DISASSEMBLE



Page 1

Item ID: D412-702-341

Accept



Setup Start



Revision ID:

Item Name: 13-Man Shoulder Harness, 3 point

Stop



Start Date: 7/13/10 Start Qty: 1.00



Cust Item ID:

Required Date: 7/13/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

u Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

Draw Nbr

Revision Nbr

DSI9511

A

120

0.00



Packaging

Packaging

Memo

0.00

Packaging

PULL FROM STOCK:

1 X D412-702-341 B 58462

DISASSEMBLE KIT AND RETURN ALL ITEMS TO STOCK

7/13/13 ①

130

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

← 7-10-13

u 7-10-13

Picklist Print

July 13, 2010 8:09:19 AM

Page 1 / 7

Work Order ID: 60483

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point









Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A new issue DD 10.04.30 verified:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D412-702-301 		Manufactured	No			105	Each	0.0000	2	-2			
Harness Assembly													
D412-702-303 		Manufactured	No			105	Each	0.0000	2	-2			
Harness Assembly													
D412-702-305 		Manufactured	No			105	Each	0.0000	1	-1			
Harness Assembly													
D412-702-307 		Manufactured	No			105	Each	0.0000	1	-1			
Harness Assembly													
D412-702-309 		Manufactured	No			105	Each	0.0000	1	-1			
Harness Assembly													
D412-702-311 		Manufactured	No			105	Each	0.0000	1	-1			
Harness Assembly													
D412-702-313 		Manufactured	No			105	Each	0.0000	1	-1			
Harness Assembly													
D412-702-315 		Manufactured	No			105	Each	0.0000	1	-1			
Harness Assembly													

D412-702-341

B 58462 6-14/7/10

Picklist Print

July 13, 2010 8:09:19 AM

Page 2 / 7

Work Order ID: 60483

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point



Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

D412-702-317 Manufactured No

105

Each

0.0000

1

-1



Harness Assembly

D412-702-321 Manufactured No

105

Each

0.0000

1

-1



Harness Assembly

D412-702-323 Manufactured No

105

Each

0.0000

1

-1



Harness Assembly

D412-702-059 Manufactured No

105

Each

6.0000

1

-1



Grommet

Location

Loc Qty

Loc Code

FG122

6

55670

6

D3761-1-041 Manufactured No

105

Each

1.0000

9

-9



HOOK & LOOP STRIP

Location

Loc Qty

Loc Code

ST245

1

57662

1

D3542-1 Manufactured No

105

Each

18.0000

2

-2



Bracket

Location

Loc Qty

Loc Code

ST245

18

32606

2

51309

4

59051

12

59651 *h*

59652 *h*

59653 *h*

55670 *h*

55429 *h*

47140 14 *h*

51309 14 *h*

July 13, 2010 8:09:19 AM

Shop Packet Print

Page 2

Picklist Print

July 13, 2010 8:09:20 AM

Page 3 / 7

Work Order ID: 60483

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

D3571-1 Manufactured No 105 Each 17.0000 7 -7

 Guide

59 726 47 *h*

Location	Loc Qty	Loc Code
ST245A	17	
58450	17	

D3571-3 Manufactured No 105 Each 11.0000 2 -2

 Guide

59 480 37

4714214

Location	Loc Qty	Loc Code
ST245A	11	
57227	1	
57363	10	

57227 10

D3572-041 Manufactured No 105 Each 10.0000 2 -2

 Guide Assembly

57

Location	Loc Qty	Loc Code
ST260	10	
58451	2	
59305	8	

58451

D3578-041 Manufactured No 105 Each 58.0000 12 -12

 Doubler

-12

P-10/7/13

Location	Loc Qty	Loc Code
ST244A	58	
52071	58	

52071

July 13, 2010 8:09:20 AM

Shop Packet Print

Page 3

Picklist Print

July 13, 2010 8:09:21 AM

Page 4 / 7

Work Order ID: 60483

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness. 3 point

Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

D3610-041

Manufactured No

105 Each

8.0000 2

-2



Bracket



Handwritten signature

Location

Loc Qty

Loc Code

ST244A

8

47144

8

Handwritten: 47144

D3618-1

Manufactured No

105 Each

77.0000 2

-2



CAP



Handwritten signature

Location

Loc Qty

Loc Code

ST244A

77

55669

77

Handwritten: 55669

AN4-10A

Purchased No

105 Each

122.0000 4

-4



Bolt



Handwritten signature

Location

Loc Qty

Loc Code

ST356

122

113422

22

114523

100

Handwritten: 1113422, 1114523

AN4-16A

Purchased No

105 Each

155.0000 2

-2



Bolt



Handwritten signature and date 12/7/13

Location

Loc Qty

Loc Code

ST358

155

114523

55

115016

50

115159

50

Handwritten: 1114523

July 13, 2010 8:09:21 AM

Shop Packet Print

Page 4

Picklist Print

July 13, 2010 8:09:21 AM

Page 5 17

Work Order ID: 60483

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

AN4-25A	Purchased	No	105	Each	82.0000	4	-4		
									
BOLT									

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST360	82	
111605	32	
114330	50	

111605

AN4-27A	Purchased	No	105	Each	52.0000	4	-4		
									
Bolt									




<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST360	52	
113538	2	
114752	50	

1113538

AN4-44A	Purchased	No	105	Each	87.0000	2	-2		
									
Bolt									

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST360	87	
104806	87	

104806

MS24693-S274	Purchased	No	105	Each	63.0000	2	-2		
									
Screw									

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST288	63	
108560	13	
114718	50	

108560

July 13, 2010 8:09:21 AM

Shop Packet Print

Page 5

Picklist Print

July 13, 2010 8:09:22 AM

Page 6 17

Work Order ID: 60483

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

MS24694-S56

Purchased

No

105

Each

119.0000

3

-3



SCREW

Location

Loc Qty

Loc Code

ST289A

119

104407

119

105

Each

120.0000

10

-10

MS24694-S58

Purchased

No



Screw

Location

Loc Qty

Loc Code

ST289A

120

104407

120

105

Each

119.0000

1

-1

MS24694-S60

Purchased

No



Screw

Location

Loc Qty

Loc Code

ST289A

119

104407

119

105

Each

10.0000

26

-26

AN960JD416

NAS1149D0463J

Purchased

No



Washer

Location

Loc Qty

Loc Code

ST351

10

108827

10

105

Each

277.0000

4

-4

AN960JD416L

NAS1149D0416J

Purchased

No



Washer

Location

Loc Qty

Loc Code

ST346

277

110153

277

M 110853

July 13, 2010 8:09:22 AM

Shop Packet Print

Page 6

Picklist Print

July 13, 2010 8:09:22 AM

Page 7 17

Work Order ID: 60483

Parent Item: D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point



Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

105

Each

4,188.000

12

-12



Nut



Lu

Location

Loc Qty

Loc Code

ST300

4188

113422

68

114523

28

114718

92

114784

2000

115108

2000

1114718

CR3212-4-4

Purchased

No

105

Each

116.0000

24

-24



Cherry Rivet



Lu 1/12/13

Location

Loc Qty

Loc Code

ST311

116

111359

16

114716

100

111359

July 13, 2010 8:09:22 AM

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